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10/530,366

04/06/2005

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EXAMINER

PHUNG, LUAT

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

11/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/530,366 | Applicant(s) HIRAKI ET AL. | |
| | Examiner Luat Phung | Art Unit 2616 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>06 April 2005</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2616

DETAILED ACTION

This is in response to a letter for patent filed on April 6, 2005 in which claims 7-16 are presented for examination and are pending. Claims 1-6 have been canceled.

Claims 7-16 are rejected.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it describes the canceled claims and not the currently amended claims. Correction is required. See MPEP § 608.01(b).
4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
6. The disclosure is objected to because of the following informalities:

Page 17, lines 12-13, it is suggested to remove a duplicate word, "now", in the sentence.

Appropriate correction is required.

Drawings

7. The drawings are objected to because in Fig. 4, element ST71, the word "RETRNASMISSIONS" is misspelled; in Fig. 6, element ST72, the word "TRANSNMIT" is misspelled. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The

figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

8. Claims 10 and 15 are objected to because of the following informalities:

Claim 10, line 4, recites "(HS-DPCCH)" following the phrase "High Speed Downlink Shared Channel"; the abbreviation should follow the phrase "High Speed Dedicated Physical Control Channel" in lines 2-3 instead.

The same problem exists in claim 15.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

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9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

10. Claims 7-16 are rejected under 35 U.S.C. 102(a) as being anticipated by applicant's admitted prior art (AAPA) 3GPP TS 25.214 V5.5.0 (3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Physical layer procedures (FDD) (Release 5)).

Regarding claim 7, AAPA discloses a mobile station apparatus (**user equipment per page 37, sec. 6A.1.1, para. 4**) comprising:

a decoder that decodes sub-frames of a downlink data channel; (**HS-PDSCH data per page 37, sec. 6A.1.1, para. 4**)

a detector that performs error detection on one decoded sub-frame; (**CRC check per page 37, sec. 6A.1.1, para. 4**)

a transmitter that transmits a response signal (**ACK or NACK per page 37, sec. 6A.1.1, para. 4**) in accordance with the error detection result (**based on the CRC check per page 37, sec. 6A.1.1, para. 4**) for the one decoded sub-frame, wherein:

when the transmitter will transmit the response signal multiple times (**'N_acknack_transmit' sub-frames per page 37, sec. 6A.1.1, para. 4**), the decoder does not decode a sub-frame (**sub-frame 'n+1' per page 37, sec. 6A.1.1, para. 4**) following the one decoded sub-frame (**last sub-frame 'n' received per page 37, sec. 6A.1.1, para. 4**).

Regarding claim 8, AAPA further discloses wherein when the transmitter will transmit the response signal N times, the decoder does not decode N-1 sub-frames following the one decoded sub-frame. **(sub-frames 'n + 1' to 'n + N_acknack_transmit - 1', i.e., N_acknack_transmit - 1 subframes not being decoded per page 37, sec. 6A.1.1, para. 4)**

Regarding claim 9, AAPA further discloses wherein the downlink data channel comprises a High Speed Physical Downlink Shared Channel (HS-PDSCH). **(HS-PDSCH data per page 37, sec. 6A.1.1, para. 4)**

Regarding claim 10, AAPA further discloses wherein the transmitter transmits the response signal through a High Speed Dedicated Physical Control Channel for a High Speed Downlink Shared Channel (HS-DPCCH). **(ACK/NACK information over HS-DPCCH sub-frames per page 37, sec. 6A.1.1, para. 4)**

Regarding claim 11, AAPA further discloses wherein the transmitter transmits one of an ACK signal and a NACK signal as the response signal. **(ACK or NACK per page 37, sec. 6A.1.1, para. 4)**

Regarding claim 12, AAPA further discloses a radio communication method comprising:

decoding sub-frames of a downlink data channel; **(HS-PDSCH data per page 37, sec. 6A.1.1, para. 4)**

performing error detection on one decoded sub-frame; **(CRC check per page 37, sec. 6A.1.1, para. 4)** and

transmitting a response signal in accordance with the error detection result for the one decoded sub-frame, **(transmit ACK/NACK based on CRC check per page 37, sec. 6A.1.1, para. 4)** wherein:

when the response signal will be transmitted multiple times **(‘N_acknack_transmit’ sub-frames per page 37, sec. 6A.1.1, para. 4)**, the sub-frame following the one decoded sub-frame **(last sub-frame ‘n’ received per page 37, sec. 6A.1.1, para. 4)** is not decoded. **(sub-frame ‘n+1’ not decoded per page 37, sec. 6A.1.1, para. 4)**

Regarding claim 13, AAPA further discloses wherein, when the response signal will be transmitted N times, N- 1 sub-frames following the one decoded sub-frame are not decoded. **(per page 37, sec. 6A.1.1, para. 4)**

Regarding claim 14, AAPA further discloses wherein the downlink data channel comprises a High Speed Physical Downlink Shared Channel (HS-PDSCH). **(HS-DPCCH per page 37, sec. 6A.1.1, para. 4)**

Regarding claim 15, AAPA further discloses wherein the response signal is transmitted through a High Speed Dedicated Physical Control Channel for a High Speed Downlink Shared Channel (HS-DPCCH). **(ACK/NACK information over HS-DPCCH per page 37, sec. 6A.1.1, para. 4)**

Regarding claim 16, AAPA further discloses wherein one of an ACK signal and a NACK signal is transmitted as the response signal. **(ACK/NACK per page 37, sec. 6A.1.1, para. 4)**

Conclusion

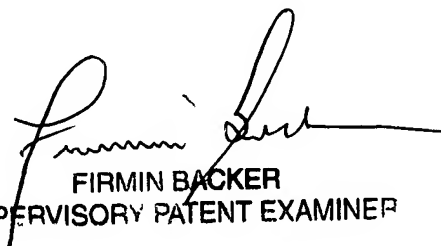
11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see form 892).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luat Phung whose telephone number is 571-270-3126. The examiner can normally be reached on M-Th 7:30 AM - 5:00 PM, F 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on 571-272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LP


FIRMIN BACKER
SUPERVISORY PATENT EXAMINER